# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

### **ENVIRONMENTAL ASSESSMENT**

For Routine Actions with Limited Environmental Impact

# Part I. Proposed Action Description

1. Applicant/Contact name and address:

LL Shaw Homestead, LLC 297 MT HWY 359 Cardwell, MT 59721-9706

- 2. Type of action: Application to Change an Existing Irrigation Water Right No. 41G 30106192. The Applicant proposes to move the point of diversion for water rights 41G 107123-00 and 41G 10712-00 from the historic point of diversion on the Stephens East Side Ditch #1 approximately one mile downstream to the diversion of the Lake Ditch from the South Boulder River.
- 3. Water source name: South Boulder River, tributary to the Jefferson River. Water is conveyed to the place of use via the Stephens East Side Ditch #1.
- 4. Location affected by project: Sections 13 and 24, T01 N, R03 W, Madison County



Figure 1. Location of the proposed point of diversion.

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to move the point of diversion for Statements of Claim 41G 107123-00 and 41G 107127-00 approximately one mile downstream from the historic point of diversion at the Stephens East Side Ditch #1 headgate located in the NWSWSW, Section 24, T01 N, R03 W, Madison County, to the diversion of the Lake Ditch from the South Boulder River. The proposed point of diversion is located in the NWSWSW, Section 13, T01 N, R03 W, Madison County. The place of use will not change. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.

- 6. Agencies consulted during preparation of the Environmental Assessment:
  - Montana Department of Fish, Wildlife & Parks (FWP) Montana Fisheries Information System (MFISH)
    - o <a href="http://fwp.mt.gov/fishing/mFish/">http://fwp.mt.gov/fishing/mFish/</a>
  - Montana Department of Environmental Quality (DEQ) Clean Water Act Information Center (CWAIC)
    - $\circ \quad \underline{http://deq.mt.gov/wqinfo/CWAIC/default.mcpx}$
  - Montana National Heritage Program (MTNHP) Species of Concern:
    - o http://mtnhp.org/SpeciesOfConcern
  - U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory Wetlands Mapper
    - o http://www.fws.gov/wetlands/Data/Mapper.html
  - Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS)
    - o http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

### Part II. Environmental Review

# 1. Environmental Impact Checklist:

## PHYSICAL ENVIRONMENT

#### WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: No significant impact identified. As determined by a search of MFISH conducted on January 19, 2017, this stretch of the South Boulder River is classified as chronically dewatered. This change will not significantly impact conditions because water will be allowed to flow instream over a greater distance and there will not be any expansion of the historically diverted volume or flow rate.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: No significant impact identified. According to a search of the DEQ CWAIC website conducted on January 19, 2017, the South Boulder River is listed as not fully supporting primary contact recreation and aquatic life due to the partial dewatering of the lower reaches of the river. This change will not significantly impact conditions because water will be allowed to flow instream over a greater distance and there will not be any expansion of the historically diverted volume or flow rate.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination*: No significant impact identified. The rights being changed are from surface water. The method and pattern of irrigation will not change which will not significantly alter return flow timing. Consumption by the irrigated crops will remain the same as no additional acreage will be irrigated. The use of water under this change will not have any significant impact on groundwater quality or supply.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

*Determination*: No significant impact identified. Water will be diverted through an existing diversion system approximately one mile downstream from the historic headgate and flow through a measurement device prior to being pumped to the place of use. Water will only be diverted a short distant through the proposed diversion works prior to being pumped to the field which will prevent any significant impact on the existing diversion system.

## UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

*Determination*: No significant impact identified. The Montana National Heritage Program's website was queried on January 19, 2017. Results are summarized below:

- Animal Species of Concern eleven (11): Townsend's Big-eared Bat, Spotted Bat, Hoary Bat, Little Brown Myotis, Fringed Myotis, Golden Eagle, Great Blue Heron, Pinyon Jay, Clark's Nutcracker, Long-billed Curlew, Plains Spadefoot.
- Animal Potential Species of Concern: None
- Animal Special Status Species one (1): Bald Eagle
- Plant Species of Concern: None
- Plant Potential Species of Concern: None
- Plant Special Status Species: None

This change is only proposing to move the point of diversion to an existing ditch approximately one mile downstream from the historic headgate. Water will be allowed to flow instream for a longer period of time, which may benefit the ecosystem via a reduction of the volume of water diverted under a more efficient irrigation system.

<u>Wetlands</u> - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: No significant impact identified. According to a January 19, 2017, search of the USFWS Wetlands Mapper, there are some freshwater emergent wetlands located within the project area. None of these wetlands overlay the irrigated area, and water will continue to be dispersed over the place of use as it was historically. There will be no significant impacts to these wetlands.

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: Not applicable. There are no ponds involved in this project.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

*Determination*: No significant impact identified. Changing the point of diversion and continuing the historic irrigation practices should not affect soil characteristics significantly. A January 19, 2017, search of the NRCS WSS site did not identify any saline seeps in the area.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

*Determination*: No significant impact identified. Water will be diverted into an existing ditch prior to being pumped the place of use. Any impacts to vegetation in the riparian area caused by routine maintenance of the ditch will not be significant.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: No impact. This project will not impact air quality.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.

*Determination*: Not applicable. The project is not located on State or Federal Lands. Furthermore, the Applicant made no mention of significant historical or archeological sites on the property.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

*Determination*: No significant impact identified. The pump located at the proposed point of diversion will require a small amount of electricity; however, this demand will not create any significant impact.

### **HUMAN ENVIRONMENT**

<u>LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</u> - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

*Determination*: No significant impact. The water rights involved in this change are located within a basin closed to new appropriations of water, so this change shall not allow any expansion of historic use without mitigation measures. The Applicant plans to irrigate the same acreage and change only the point of diversion. There will be no expansion of historically diverted flow rate of volume which will not create any significant impacts.

<u>ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES</u> - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

*Determination*: No impact identified. This change is located on private property and will not affect access to recreational activities or the quality of recreational and wilderness activities.

**<u>HUMAN HEALTH</u>** - Assess whether the proposed project impacts on human health.

*Determination*: No impact identified. Changing the point of diversion and continuing historic irrigation patterns will not impact human health.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination*: No impact identified. The project does not impact government regulations on private property rights.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

#### Impacts on:

- (a) Cultural uniqueness and diversity? No impacts identified.
- (b) <u>Local and state tax base and tax revenues</u>? No impacts identified.
- (c) Existing land uses? No impacts identified.
- (d) Quantity and distribution of employment? No impacts identified.
- (e) <u>Distribution and density of population and housing</u>? No impacts identified.
- (f) <u>Demands for government services</u>? No impacts identified.

- (g) <u>Industrial and commercial activity</u>? No impacts identified.
- (h) Utilities? No impacts identified.
- (i) <u>Transportation</u>? No impacts identified.
- (j) <u>Safety</u>? No impacts identified.
- (k) Other appropriate social and economic circumstances? No impacts identified.
- 2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

- **3. Describe any mitigation/stipulation measures:** The measurement requirement set by the South Boulder River Enforcement Project will be used to demonstrate the Applicant will not divert more water than was diverted historically.
- 4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: The "no action" alternative would be to continue diverting water into the Stephens East Side Ditch #1. This would lead to continued diversion losses stemming from an inefficient conveyance system. Changing the point of diversion would allow water to flow instream for a greater distance and help maintain the natural stream flow characteristics of the South Boulder River.

#### PART III. Conclusion

- 1. **Preferred Alternative:** The preferred alternative is to grant the change application if Applicant has proven the criteria of 85-2-402, MCA.
- 2 *Comments and Responses:* None at this time.
- 3. Finding:

Yes\_\_\_\_ No\_X\_ Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action:

Name of person(s) responsible for preparation of EA:

Name: Brant Lumpkin *Title*: Water Resource Specialist

Date: 1/19/2017